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Application No.: 10/786217
Docket No.: CL1375USCNT

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Amendments to Claims

1. (Currently amended) A composition comprising ~~nylon 6, nylon 66, or a mixture thereof~~ one or more polyamides, with about 1%-50% by volume of a mineral filler calcium carbonate or titanium dioxide having an aspect ratio of less than about 5, the filler calcium carbonate or titanium dioxide having an average equivalent spherical diameter in the range of about 0.1 to less than about 3.5 micrometers, and ~~a saturated organic acid~~ saturated fatty acids, a salt thereof, or a mixture thereof, at a concentration of at least 0.5% by weight of the mineral filler calcium carbonate or titanium dioxide.

2. (Currently amended) The composition according to Claim 1 wherein the composition comprises about 5-30% by volume of the mineral filler calcium carbonate or titanium dioxide.

3. (Currently amended) The composition according to Claim 1 wherein the composition comprises about 10-20% by volume of the mineral filler calcium carbonate or titanium dioxide.

4. (Original) The composition according to Claim 1 wherein the average equivalent spherical diameter is about 0.5 to about 2 micrometers.

5. (Currently amended) The composition according to Claim 1 wherein the concentration of saturated organic fatty acids, salt thereof, or mixture thereof is in the range of about 0.5-4%.

6. (Canceled)

7. (Currently amended) The composition according to Claim ~~6~~ 1 wherein the saturated fatty acid is stearic acid.

8. (Currently amended) The composition according to Claim 4 wherein the saturated organic fatty acid is stearic acid at a concentration of about 2% by weight on the weight of the filler.

9. (Canceled)

10. (Previously presented) A shaped article comprising the composition according to Claim 1.

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11. (Currently amended) A process for forming a composition comprising the steps of:

- (a) combining ~~nylon 6, nylon 66, or a mixture thereof~~ one or more polyamides with a mineral filler calcium carbonate or titanium dioxide having an aspect ratio of less than 5, the filler calcium carbonate or titanium dioxide having an average equivalent spherical diameter in the range of about 0.1 to less than 3.5 micrometers, and a saturated ~~organic~~ fatty acid, salt thereof, or mixture thereof, at a concentration of at least about 0.5% by weight of the mineral filler, the filler and the nylon being combined at a weight ratio given by the formula:

$$W_f/W_p = [VF/(1-VF)] \cdot D_f/D_p$$

where W_f is the weight of the filler, W_p is the weight of the ~~the nylon~~ one or more polyamides, VF is the desired volume fraction of filler, in the range of about 0.01-0.5, D_f is the density of the filler, and D_p is the density of the ~~the nylon~~ one or more polyamides;

- (b) heating the combination to a temperature above the melting point of the ~~nylon~~ one or more polyamides to form a molten composition;
(c) mixing the molten composition to provide a homogenous melt; and,
(d) cooling the molten composition.

12. (Original) The process of Claim 11 wherein VF is in the range of about 0.10-0.20.

13. (Original) The process of Claim 11 wherein the average equivalent spherical diameter is about 0.5-2 micrometers.

14. (Canceled)

15. (Currently amended) The process of Claim ~~13~~ 11 wherein the saturated ~~organic~~ fatty acid is stearic acid at a concentration of about 2% by weight on the weight of the ~~filler~~ calcium carbonate or titanium dioxide.

16. (Canceled)

17. (Canceled)